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## TWO CASES OF

## DISEASE OF THE FALLOPIAN TUBES.

WITH COMPLICATIONS, AND NOTES ON DIAGNOSIS.

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## Two Cases of Disease of the Fallopian Tubes, with Complications, and Notes on Diagnosis.\*

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I AM induced to report the following cases on account of interesting features in the diagnosis of both, and the rarity of hydrops tubæ, especially from the cause present in this case.

CASE I. - Hydrops tubæ on right side, ovarian tumor on the left. J. M. D., aged twenty-nine years. Previous health until three years ago excellent. She then had an attack of pelvic inflammation, cause unknown, and since has had a history of irregular menstruation. In the spring of 1893 she had another attack of pelvic inflammation; and a third beginning the thirtieth day of August of this year. From the last attack she never completely recovered, for although able to be up and about, pelvic pain never entirely left her. Three days before entering the hospital she was obliged to again take her bed, and it was determined that operative measures were necessary for her restoration to health.

The family history shows one sister, a five-para, with evidences of a tumor in the pelvis; a brother has had a foreign growth of some kind removed; three other sisters, all older than the patient, are apparently quite free from disease. The history of the older generations could not be ascertained.

In February, 1894, the patient was curetted by Dr. Strittmatter, of Philadelphia, for the relief of the metror-rhagia, then a prominent symptom of her complaint.

During her last sickness she was under the care of Dr. Osman of Dorchester, who suspected the character of her disease, and insisted upon an examination under ether; the vagina had been so irritable that it was impossible to make a satisfactory examination without anæsthesia. At the time of her entrance to the hospital she had no fever or other symptom of acute inflammation.

The examination showed a mass in the pelvis to the right, lying high, apparently separated from the uterus, and extending upwards three finger-breadths above the pubes. In Douglas' pouch, reaching further to the patient's left, was a smooth, rounded mass, obviously of a cystic nature, as large as a goose-egg, seemingly unconnected with the mass on the right. Neither ovary could be determined. The uterine cervix was somewhat enlarged, but with a clean os. The fundus of the uterus was in an anterior position.

Upon opening the abdomen the nature of the disease was readily and accurately decided. The uterus was slightly enlarged and presented three

<sup>\*</sup> Read before the Gynæcological Society of Boston, March 16, 1895.

small fibroids: one, sub-peritoneal, about pea-sized, near the centre of its anterior surface; the second, more interstitial, situated somewhat anteriorly at the left cornu, the largest present, and about the size of a walnut; the third of hazlenut-size, that lay at the origin of the right Fallopian tube, markedly interstitial, but circumscribed, which pressed upon the lumen of the tube so as to obstruct the outflow of secretions and interfere with the tubal circulation.

At its origin, the right tube (Fig. 1) was smaller than usual, and from this point it ascended upward, outward and backward, making three slight convolutions, and rapidly growing larger in diameter, until it reached two finger-breadths above the uterus, when it turned and descended backward, inward and downward, reaching into Douglas' pouch as low as the internal os. In its descending portion the enlargement of the tube was not uniform, but characterized by three distinct swellings, the diameters of which increased from above downwards, until the lower, at the fibrinated extremity, reached the measurement of two and one quarter inches.

The upper portion of the tumor presented in the abdominal incision in a position anterior to the normal plane of the uterus, and resembled in appearance a coil of dilated gut. The lower portion of the tube reached far over to the patient's left, and from its position and shape gave one the impression, at the earlier examination, that its origin was from the left side.

The left ovary (Fig. 2) was con-

verted into a cystic tumor, about the size of a hen's egg, and with the enlarged Fallopian tube was firmly embedded in a great mass of adhesions; the whole situated above the greatly distended extremity of the right tube, which obscured it during a digital examination per vaginam.

The specimens removed are illustrated in the accompanying cuts, which were drawn from nature soon after removal. The outline sketch (Fig. 3), with the uterus, is diagramatic, and shows the relation of the tumors to the uterus.

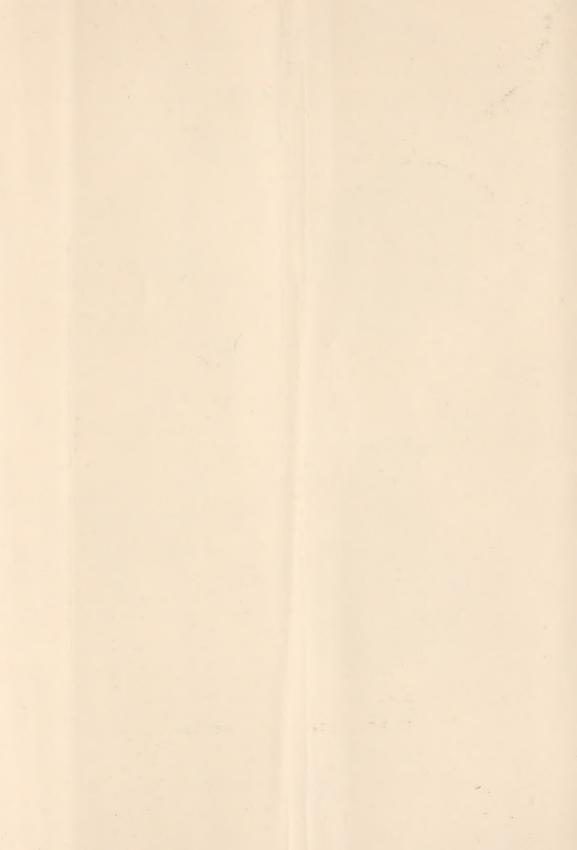
The removal of the tube and ovary of the right side was not attended with any particular difficulty, but the left ovary was firmly imbedded in adhesions, and had to be cut out in great part, as it was impossible to wholly tear it away.

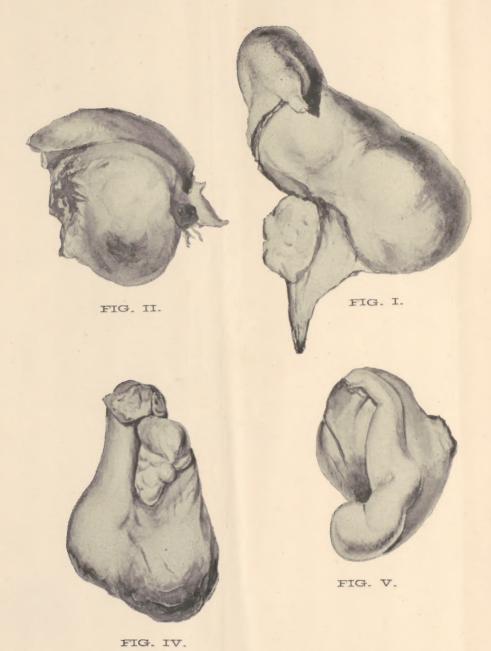
Uninterrupted recovery followed. During the attacks of pelvic inflammation the pain had always been more severe on the left side, although there was usually considerable on the right before the attack ceased. This was in harmony with the pathological conditions.

It is my opinion that in this case the fibroid condition of the uterus was the primary cause of the hydrops tubæ, which is one of the rarer causes attributed to this disease.

CASE II. — Double pus tubes, abscess of right ovary, abscess of omentum, intestinal adhesions.

Mrs. W. J. C., aged twenty-seven years, married eight years, one para; no miscarriage. Previous health good until the birth of her child, seven years ago, when she experienced a stellate fracture of the cervix and a





DR. TUTTLE'S CASES OF DISEASED TUBES.

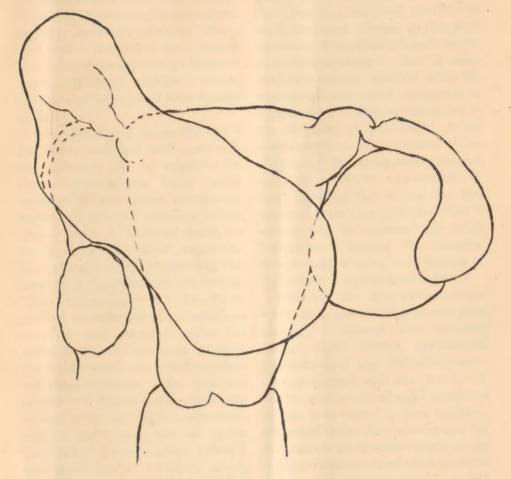


FIG. III.



slight laceration of the perineum, followed by symptoms of endometritis and subinvolution, that have continued to date. There has been periodical and more or less constant headache, metrorrhagia subsequent to every moderate physical effort, with regular flow every four weeks. She has used on an average between twelve and fifteen napkins a month, but at times has required from twenty to thirty.

When first called to see the case I found her suffering with pain over the abdomen, loss of appetite, insomnia, constipation, high fever, rapid pulse, and great emaciation, digital examination revealing a fluctuating mass in Douglas' pouch, extending into the ovarian regions on the right and left, and reaching to a level with the fundus of the uterus. The ovaries could not be distinguished as such, and the uterus was crowded well forward under the pubes, in such a manner as to make the fundus much more readily palpated than normally. She had had several well defined chills which, considered with the high temperature and fluctuating mass, had led to the diagnosis of pelvic abscess before I was called by her attending physician, and the only point for further consideration was whether the disease was intra-tubal, intra-ovarian, intra-ligamentous, or extra-peritoneal, for I did not then even think of the complication of omental abscess. certainly a rare form if one can judge from the small amount of literature on the subject.

The rarity of the purely extra and intra-ligamentous forms biased me

strongly to favor the remaining varieties, and an excessive purulent uterine discharge (the nurse said it was impossible for her to keep the vagina clean, as within an hour after douching the parts there would be as much discharge present as though it had never been cleansed, and careful examination showed that it came from the uterus), coupled with the emaciation and other symptoms of suppuration of long standing, led to the diagnosis of pus tube. I did not recognize the existence of an abscess of the ovary and omentum until the abdomen was opened; in fact, knowing that a pus sac was present, I was very particular that it should not be ruptured by rough manipulation during the examination, a thing which I have known to occur with a rapidly fatal result.

Believing the only rational treatment of a pus tube is its complete removal, I opened the abdomen under strict aseptic precautions. The infiltrated and distended omentum presented and was found adherent with a coil of small intestines to the left tube; it was carefully separated with the bowels, and by this means an abscess cavity in its centre, which communicated with the tube, was discovered. The gut and omentum were parted, the bleeding points in the adhesions secured, the infiltrated suppurating mass drawn from the abdominal cavity, a line of shoemakers stitchers passed through the base and tied sufficiently tight to prevent bleeding, the mass cut away, and the raw surfaces covered in by folding together and stitching.

The left tube and ovary were then

freed from the inflammatory bands, drawn up and sewed off similarly to the omentum, and removed. So far there had been no pus spilled into the abdominal cavity, but in the attempt to remove the right tube and ovary a rupture of the sac occurred, and some of its purulent contents escaped in spite of strenuous efforts to catch it all upon a sponge. The pus was not fetid. The raw surfaces left by cutting away the tube and ovary, as it lies in the pelvis without tension, is somewhat of a V-shape, a more or less triangular shaped piece having been removed from the broad ligament, and if this gap is not closed the fundus of the uterus will be robbed of much of its support, and may later assume a retroverted position, which subsequently may be attended with an extreme condition of prolapse. By sewing the sides of the V together, not only is the raw surface covered in and intestinal adhesions later averted, but the broad ligament is repaired, made somewhat more tense than before, and the uterus held up in its normal position and in a most natural manner.

I have adopted this method for some time with considerable satisfaction, and so finished the operation in the present case. The abdomen was drained with a rubber tube for four days.

A sharp reaction followed the operation, which subsided in two days, and a slight secondary fever followed the withdrawal of the drainage tube. The upper part of the wound, which was closed with tendon, healed by primary union, and the lower part, where the tube was inserted, by granulation in four weeks.

The accompanying illustrations were taken from nature immediately after the removal of the organs, the right tube with abscess of the ovary (Fig. 5) being somewhat smaller than before their removal, owing to the loss of part of their contents after rupture.

Looking backward upon the above cases it becomes interesting to study the comparative diagnosis. Both are of long standing, - a fact developed from the previous history, - but the first shows no impairment of nutrition, no loss of tone or strength, simply disablement, with at times attacks of pain due to peritonitis, circumscribed, and of comparatively non-virulent infective character. The other has been less disabled, pain more constant but less acute, nutrition greatly impaired, with gradual wasting of the body, and the superimposed acute attack, which finally led to the operation, of a severe type and attended with great prostration. She had eaten nothing to speak of for a week before entering the hospital. In the determination of the character of the large tube, the smooth, fluctuating mass in Douglas' pouch should be considered in conjunction with the smaller, more definable supra-pubic mass, which by its size, convolutions, position, and sense to the touch, would indicate its tubal character, the principal difficulties to the examination being a thick layer of abdominal fat, or some interposing mass, such as the omental abscess found in the second case. distension of the tube is not uniform throughout, but greatest at the fibrinated extremity, and decreases gradually and nearly uniformly

until it reaches the uterus, at which point the increased diameter of the tube depends much on the infiltration and swelling of the walls peculiar to the inflammatory changes. Thus, no matter how much the distal end of the tube may be dilated, the proximal is relatively little, and at a point where it is nearest the abdominal wall is about the thickness of a finger. If the fluctuating mass in the pelvis was an abscess of the tube, there would be, so long as its contents were pent up and under pressure, symptoms of the absorption of the products of suppuration, in greater or less quantity, fever, emaciation, rapid pulse, prostration, etc. If the pressure is relieved by evacuaation in part or whole, through the normal passageway or otherwise, the fever and other symptoms may entirely disappear, except perhaps certain pain and disability, and in place of the fluctuating mass a firmness of the tissues is felt which, too, may ultimately entirely disappear, or leave behind a thick, cord-like mass, which by its position and shape will be recognized as an enlarged tube.

A combination of conditions which is difficult to diagnose has recently occurred in my practice, where the symptoms of peritonitis, pain, fever, tympanites, rigid abdomen, etc., were marked, and had led to a diagnosis of appendicitis, and where vaginal examination revealed a fluctuating mass, naturally supposed to be an abscess at the side of the uterus to the right, and extending somewhat into Douglas' pouch. This resembled a distended tube, but operation proved the case to be an appendicitis,

without abscess, the appendix having a large ulcer, with thickened edges in its centre, and adherent to a small cyst of the broad ligament. In a case of simple ovarian tumor, tubal characteristics are wanting, and the tumor occupies a position more to the side from which it originated. If a long free pedicle is present the tumor tends to rise upward as it grows.

Where a cyst of the broad ligament of any magnitude is present. the uterus is pushed over to the opposite side, and perhaps so crowded downward and backward into the pelvis that the fundus cannot be felt by the examiner's finger through the abdominal wall, because the tumor rises over and above it. This is due to the fact that as the tumor grows downward between the folds of the broad ligament, the uterus, and rigid bony wall of the pelvis, it at first displaces the movable uterus laterally, beginning at the fundus, which part, owing to its greater mobility, receives the most displacement. As the growth extends upward it receives pressure from the intestines and abdominal wall, which tends to crowd it downward, and which is transmitted to the uterus, tilting it still more, until ultimately it may lie almost crosswise to the pelvis. Owing to the changes in the position of the uterus, and to the position assumed by the tumor, I have known a number of expert diagnosticians to mistake a moderately sized cyst of the broad ligament for the fundus of When the cyst has the uterus. reached considerable proportions there should be no difficulty in making a diagnosis.



